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EXAMINER

THOMPSON, JAMES A

ART UNIT PAPER NUMBER

2624

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/851,918

Applicant(s)

BERCHTOLD ET AL.

Examiner

James A Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2001 and 30 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 02 July 2001 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Specifically, a concise explanation of relevance has not been provided for DE 30 46 417 and DE 196 50 223.

Claim Objections

2. Claims 3-4 are objected to because of the following informalities: On line 3 of claim 3, "said roll being measured and stored" should be changed to "said roll is measured and stored" in order to be in proper English form. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-2 and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Jansen (US Patent 6,108,436).

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Regarding claim 1: Jansen discloses detecting a position of a reference object (figure 5a(21) and column 3, lines 61-63 of Jansen) on the printing medium (figure 3(8) and column 4, lines 18-20 of Jansen); and scanning the measurement object with a sensor means based on a relative position of the measurement object with respect to the detected position of the reference object (column 4, lines 32-35 of Jansen).

Regarding claim 2: Jansen discloses that the sensor means is moved in a translational movement thereof to scan said measurement object (column 4, lines 6-8 and lines 32-35 of Jansen), sensor means movement being activated responsive to a detection of the reference object (column 3, lines 61-63 and column 4, lines 11-17 of Jansen). The red reference mark (figure 5a(21) of Jansen) is first detected and measured (column 4, lines 32-35 of Jansen) and used to determine the locations of the other marks (column 3, lines 61-63 of Jansen), which are measured in response to the detection of said red reference mark (column 4, lines 11-17 of Jansen). Since the other reference marks are separated by specific distances (column 4, lines 6-8 of Jansen), a translational movement of said sensor means is inherent since measurement would otherwise not be possible.

Regarding claim 6: Jansen discloses a scanning apparatus (figure 3 of Jansen) comprising sensor means (figure 4 and column 2, lines 55-61 of Jansen), said sensor means including a plurality of measurement heads (figure 3(14); column 4, lines 36-38; and column 7, lines 14-16 of Jansen), a printing medium (figure 3(8) of Jansen) having a detection object (figure 5a(21) and column 3, lines 61-63 of Jansen) arranged thereon at a predetermined distance running in a printing medium transport direction from said measurement object (column 4, lines 6-11 of

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Jansen), at least one of said measurement heads being operative to detect said reference object (column 4, lines 32-35 of Jansen), remainder ones of said measurement heads being activatable to detect and scan said measurement object (column 3, lines 61-63 and column 4, lines 11-17 of Jansen), said remainder ones of measurement heads being activated responsive to said reference object detection (column 4, lines 11-17 of Jansen). The red reference mark (figure 5a(21) of Jansen) is first detected and measured (column 4, lines 32-35 of Jansen) and used to determine the locations of the other marks (column 3, lines 61-63 of Jansen), which are measured in response to the detection of said red reference mark (column 4, lines 11-17 of Jansen). Separate measurement heads can be used for each color (column 7, lines 14-16 of Jansen).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-4 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen (US Patent 6,108,436) in view of Hern (US Patent 5,546,859).

Regarding claim 3: Jansen discloses that the printing medium is carried on a roll (figure 1(7) and column 3, lines 15-22 of Jansen).

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Jansen does not disclose expressly that, at an instant of detection of the reference object, a corresponding angle ϕ of rotation of said roll is measured and stored.

Hern discloses that, at an instant of detection of a reference object (column 4, lines 54-59 of Hern), a corresponding angle ϕ of rotation of said roll is measured (column 6, lines 6-13 of Hern) and stored (column 6, lines 13-16 of Hern).

Jansen and Hern are combinable because they are from the same field of endeavor, namely image processing for printing presses. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to determine and store an angular position of the roller when the reference object is detected, as taught by Hern. The motivation for doing so would have been to track the location of regions (column 6, lines 13-16 of Hern), such as the initial reference marks (figure 5a(21) of Jansen) upon which location the locations of the reference marks are based (column 4, lines 6-11 of Jansen). Therefore, it would have been obvious to combine Hern with Jansen to obtain the invention as specified in claim 3.

Regarding claim 4: Jansen discloses that the measurement object is scanned when the roll has rotated a specific increment (column 4, lines 11-17 of Jansen).

Jansen does not disclose expressly that an angle-of-rotation increment is calculated based on a diameter of said roll, the measured angle ϕ of rotation, and a predetermined distance running in a printing medium transport direction between the reference object and the measurement object, the measurement object being scanned when said roll has rotated said angle increment.

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Hern discloses that an angle-of-rotation increment is calculated based on a diameter of said roll (column 5, lines 50-57 of Hern), the measured angle ϕ of rotation (column 5, lines 50-54 and column 6, lines 6-13 of Hern), and a predetermined distance (d_2) running in a printing medium transport direction between the reference object and the measurement object (column 5, lines 50-54 of Hern), the measurement object being marked when said roll has rotated said angle increment (column 6, lines 9-13 of Hern).

Jansen and Hern are combinable because they are from the same field of endeavor, namely image processing for printing presses. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to calculate an angle-of-rotation increment, as taught by Hern, and perform an image processing operation when the roll has rotated said angle increment, as also taught by Hern, said image processing operation being scanning at a specified increment, as taught by Jansen. The motivation for doing so would have been to track the location of regions (column 6, lines 13-16 of Hern), such as the initial reference marks (figure 5a(21) of Jansen) upon which location the locations of the reference marks are based (column 4, lines 6-11 of Jansen). Therefore, it would have been obvious to combine Hern with Jansen to obtain the invention as specified in claim 4.

Regarding claim 22: Jansen discloses that the printing medium is carried on a roll (figure 1(7) and column 3, lines 15-22 of Jansen).

Jansen does not disclose expressly an angle measurement transmitter carried on said printing roll for detecting an angle

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of rotation of said printing roll, said transmitter being electrically operatively connected to the apparatus.

Hern discloses an angle measurement transmitter carried on said printing roll (figure 2(13) and column 5, lines 20-24 of Hern) for detecting an angle of rotation of said printing roll (column 6, lines 6-13 of Hern), said transmitter being electrically operatively connected to the apparatus (column 5, lines 21-24 of Hern).

Jansen and Hern are combinable because they are from the same field of endeavor, namely image processing for printing presses. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the angle measurement transmitter taught by Hern to determine an angular position of the roller. The motivation for doing so would have been to track the location of regions (column 6, lines 13-16 of Hern), such as the initial reference marks (figure 5a(21) of Jansen) upon which location the locations of the reference marks are based (column 4, lines 6-11 of Jansen). Therefore, it would have been obvious to combine Hern with Jansen to obtain the invention as specified in claim 22.

Regarding claim 23: Jansen discloses a control electronics unit (figure 4(37) and column 4, lines 40-44 of Jansen), said control electronics unit being operative to scan the measurement object when the roll has rotated a specific increment (column 4, lines 11-17 of Jansen).

Jansen does not disclose expressly that said control electronics unit detects a current angle of rotation of said printing roll at detection of said reference object and trigger activation of apparatus scanning when a predicted angle-of-rotation increment relative to that at detection is reached.

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Hern discloses detecting a current angle of rotation of said printing roll at detection of said reference object (gap) (column 6, lines 6-13 of Hern) and trigger activation of apparatus marking when a predicted angle-of-rotation increment relative to that at detection is reached (column 6, lines 9-13 of Hern).

Jansen and Hern are combinable because they are from the same field of endeavor, namely image processing for printing presses. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to calculate an angle-of-rotation increment, as taught by Hern, and perform an image processing operation when the roll has rotated said angle increment, as also taught by Hern, said image processing operation being scanning at a specified increment, as taught by Jansen. The motivation for doing so would have been to track the location of regions (column 6, lines 13-16 of Hern), such as the initial reference marks (figure 5a(21) of Jansen) upon which location the locations of the reference marks are based (column 4, lines 6-11 of Jansen). Therefore, it would have been obvious to combine Hern with Jansen to obtain the invention as specified in claim 23.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen (US Patent 6,108,436) in view of Magde (US Patent 5,363,174).

Regarding claim 5: Jansen discloses that scanning is triggered in accordance with a predetermined distance running in a printing medium transport direction between the reference object and the measurement object (column 4, lines 11-17 of Jansen). A printing press moves at a particular speed and, as

is well-known, $\text{time} = \frac{\text{distance}}{\text{speed}}$. Therefore, it is inherent that said scanning is activated with a time delay relative to an instant of detection of the reference object, since a delay based on a predetermined distance is the same as a delay based on a predetermined time in the case of a constant speed printing press.

Jansen does not disclose expressly that said scanning, which is activated with a time delay, is triggered in accordance with a currently determined printing medium speed and a predetermined distance.

Magde discloses triggering a scanning operation with a time delay in accordance with a currently determined printing medium speed and a predetermined distance (column 9, lines 17-21 of Magde). Again, since $\text{time} = \frac{\text{distance}}{\text{speed}}$, the currently determined speed is inherent since the time delay required for a particular distance could not be known otherwise.

Jansen and Magde are combinable because they are from the same field of endeavor, namely image processing and correction for printing machines. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to base the scanning operations taught by Jansen on a currently determined print speed and a predetermined distance, as taught by Magde. The suggestion for doing so would have been a time interval can correlate to an equivalent distance interval (column 9, lines 17-21 of Magde). Therefore, it would have been obvious to combine Magde with Jansen to obtain the invention as specified in claim 5.

8. Claims 7-9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen (US Patent 6,108,436) in view of Mamizuka (US Patent 6,061,144).

Regarding claim 7: Jansen does not disclose expressly that said measurement object is a longitudinal measurement strip disposed along a coordinate direction approximately transversely of the printing medium transport direction.

Mamizuka discloses a longitudinal measurement strip (figure 4(46(Bk)) of Mamizuka) disposed along a coordinate direction approximately transversely of the printing medium transport direction (column 10, lines 16-21 of Mamizuka).

Jansen and Mamizuka are combinable because they are from the same field of endeavor, namely digital image processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the transversely oriented measurement strips taught by Mamizuka for the reference and measurement objects taught by Jansen. The motivation for doing so would have been to correct for a set of gradations corresponding to a desired gamma function (column 5, lines 13-22 of Mamizuka). Therefore, it would have been obvious to combine Mamizuka with Jansen to obtain the invention as specified in claim 7.

Further regarding claim 8: Mamizuka discloses that said measurement strip includes a linearly arranged chain of measurement fields thereon (column 10, lines 4-6 of Mamizuka), said measurement fields having specific color density values (column 10, lines 6-13 of Mamizuka).

Regarding claim 9: Jansen discloses that, for detection and scanning purposes, each measurement head is associated with at least one measurement section (column 4, lines 18-20 and

column 7, lines 14-16 of Jansen), which measurement section includes measurement fields (figure 5a(22-26) and column 4, lines 11-17 of Jansen).

Regarding claim 16: Jansen discloses that at least one of said measurement fields comprises the reference object (figure 5a(21) and column 3, lines 61-63 of Jansen).

9. Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen (US Patent 6,108,436) in view of Mamizuka (US Patent 6,061,144) and Sasanuma (US Patent 5,856,876).

Further regarding claim 10: Mamizuka discloses that each measurement section comprises two adjacent measurement zones (figure 4(46(Bk)) of Mamizuka). The set of four light patches and the set of four dark patches for any of the colors shown in figure 4 of Mamizuka can be considered two separate measurement zones.

Jansen in view of Mamizuka does not disclose expressly that said measurement zones are spaced apart and intervened by a narrow track.

Sasanuma discloses separating measurement zones with a narrow track (column 10, lines 1-5 of Sasanuma), as can clearly be seen in figure 5 of Sasanuma.

Jansen in view of Mamizuka is combinable with Sasanuma because they are from the same field of endeavor, namely digital image processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to space apart two sets of the density patches taught by Mamizuka with a narrow track, as taught by Sasanuma, thus creating two adjacent measurement zones. The motivation for doing so would have been

that overlapping would adversely affect the results when the correction test patterns are read (column 10, lines 1-5 of Sasanuma) and a narrow track between measurement zones would clearly help mitigate this problem. Therefore, it would have been obvious to combine Sasanuma with Jansen in view of Mamizuka to obtain the invention as specified in claim 10.

Regarding claim 11: Jansen discloses that the measurement zones have identically recurring sequences of color density values (column 3, lines 48-50 of Jansen).

Regarding claims 12 and 13: Jansen discloses that each measurement zone has measurement fields of a same longitudinal dimension (column 4, lines 9-11 of Jansen). Each measurement field (figure 5a(22-26) of Jansen) is 0.2x0.2 mm (column 4, lines 9-11 of Jansen).

Further regarding claim 14: As discussed above in the arguments regarding claim 10, the set of four light patches and the set of four dark patches for any of the colors shown in figure 4 of Mamizuka can be considered two separate measurement zones. Therefore, each measurement zone includes a common number of measurement fields.

Further regarding claim 15: Mamizuka discloses that each measurement zone has at least one minimum and one maximum color density value (column 10, lines 10-13 of Mamizuka).

10. Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen (US Patent 6,108,436) in view of Mamizuka (US Patent 6,061,144) and Toyofuku (US Patent 5,289,000).

Regarding claim 17: Jansen discloses that a separate measurement head is used for each color (column 7, lines 14-16 of Jansen).

Jansen does not disclose expressly that said measurement heads are arranged one after another along said coordinate direction, the measurement heads being movable along said coordinate direction.

Mamizuka discloses that measurement fields are arranged one after another along said coordinate direction (figure 4 and column 10, lines 6-12 of Mamizuka).

Jansen and Mamizuka are combinable because they are from the same field of endeavor, namely digital image processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use arrange the measurement fields as taught by Mamizuka, thus requiring that the measurement heads taught by Jansen are arranged one after another along said coordinate direction in order to read said measurement fields. The motivation for doing so would have been that such an arrangement of measurement fields allows for the correction of a set of gradations corresponding to a desired gamma function (column 5, lines 13-22 of Mamizuka). Therefore, it would have been obvious to combine Mamizuka with Jansen.

Jansen in view of Mamizuka does not disclose expressly that the measurement heads being movable along said coordinate direction.

Toyofuku discloses moving a measurement head (figure 2(35) of Toyofuku) along a particular coordinate direction (column 7, line 68 to column 8, line 8 of Toyofuku).

Jansen in view of Mamizuka is combinable with Toyofuku because they are from the same field of endeavor, namely digital

image processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to move the measurement heads in a predetermined direction, as taught by Toyofuku, said predetermined direction being the coordinate direction of the measurement fields taught by Mamizuka. The motivation for doing so would have been to move the measurement heads to a position in which said measurement heads can properly read the image data (column 7, lines 59-63 and column 8, lines 4-8 of Toyofuku). Therefore, it would have been obvious to combine Toyofuku with Jansen in view of Mamizuka to obtain the invention as specified in claim 17.

Regarding claim 18: Jansen discloses that the apparatus is disposed above a printing machine roll (figure 3 of Jansen), the printing medium being carried on said roll (figure 1(7) and column 3, lines 15-22 of Jansen). As can clearly be seen in figure 3 of Jansen, the apparatus is disposed above the printing machine paper (figure 3(8) of Jansen), taken from the printing machine roll (figure 1(7) of Jansen). Further, as can clearly be seen in figure 2 of Jansen, the apparatus (figure 2(12a-12d) of Jansen) is disposed above the printing machine rollers (figure 2(6a-6d) of Jansen) which are disposed above the printing machine roll (figure 1(7) of Jansen).

Further regarding claims 19 and 20: Toyofuku discloses a slide device (figure 2(90) of Toyofuku), said measurement heads being carried on said slide device (column 8, lines 24-28 of Toyofuku), said slide device being movable translationally along a particular coordinate direction (column 7, line 68 to column 8, line 5 of Toyofuku). As discussed in the arguments regarding claim 17, upon which claims 19 and 20 are dependent, the combination of Toyofuku with Jansen in view of Mamizuka provides

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that said predetermined direction of Toyofuku is the coordinate direction of the measurement fields taught by Mamizuka.

Regarding claim 21: Jansen discloses that a separate measurement head is used for each color (column 7, lines 14-16 of Jansen) and each measurement head scans a measurement section associated with said each measurement head (column 4, lines 11-17 of Jansen).

Jansen does not disclose expressly that the associated measurement section scanned by each measurement head is a measurement section of said measurement strip, and is scanned in progressive time with slide device translational movement.

Mamizuka discloses that each measurement section is a measurement section of a measurement strip (figure 4(46(Bk)) and column 10, lines 16-21 of Mamizuka).

Jansen and Mamizuka are combinable because they are from the same field of endeavor, namely digital image processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the measurement strips taught by Mamizuka for organizing the measurement objects taught by Jansen. The motivation for doing so would have been to correct for a set of gradations corresponding to a desired gamma function (column 5, lines 13-22 of Mamizuka). Therefore, it would have been obvious to combine Mamizuka with Jansen.

Jansen in view of Mamizuka does not disclose expressly that said scanning is performed in progressive time with slide device translational movement.

Toyofuku discloses scanning in progressive time with slide device translational movement (column 8, lines 4-8 of Toyofuku).

Jansen in view of Mamizuka is combinable with Toyofuku because they are from the same field of endeavor, namely digital

image processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to progressively scan as taught by Toyofuku. The motivation for doing so would have been to keep an equal light path length to the CCD (column 8, lines 6-8 of Toyofuku) and thus obtain a proper reading with the CCD. Therefore, it would have been obvious to combine Toyofuku with Jansen in view of Mamizuka to obtain the invention as specified in claim 21.

11. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jansen (US Patent 6,108,436) in view of Hern (US Patent 5,546,859) and Magde (US Patent 5,363,174).

Regarding claim 24: Jansen discloses a control electronics unit (figure 4(37) and column 4, lines 40-44 of Jansen), said control electronics unit triggering activation of said scanning apparatus with a predetermined distance between the reference object (figure 5a(21) of Jansen) and the measurement object (figure 5a(22) of Jansen) (column 4, lines 11-17 of Jansen). A printing press moves at a particular speed and, as is well-known, $\text{time} = \frac{\text{distance}}{\text{speed}}$. Therefore, it is inherent that said

scanning is activated with a time delay relative to an instant of detection of the reference object, since a delay based on a predetermined distance is the same as a delay based on a predetermined time in the case of a constant speed printing press.

Jansen in view of Hern does not disclose expressly that said scanning apparatus is activated with a predicted time delay, said time delay being functionally dependent on a

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predetermined distance between the reference object and the measurement object.

Magde discloses triggering a scanning operation with a predicted time delay, said time delay being functionally dependent on a predetermined distance (column 9, lines 17-21 of Magde).

Jansen and Magde are combinable because they are from the same field of endeavor, namely image processing and correction for printing machines. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to base the scanning operations taught by Jansen on a currently predicted time delay, as taught by Magde. The suggestion for doing so would have been a time interval can correlate to an equivalent distance interval (column 9, lines 17-21 of Magde). Therefore, it would have been obvious to combine Magde with Jansen to obtain the invention as specified in claim 24.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A Thompson whose telephone number is 703-305-6329. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on 703-308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James A. Thompson
Examiner
Art Unit 2624

JAT
03 December 2004



THOMAS R.
~~THOMAS~~ LEE
PRIMARY EXAMINER